



DIGITAL NEIGHBOURHOOD INSTRUMENT

**A GENERAL MODEL AND TOOLBOX
TO ESTABLISH A DIGITAL CENTER**

URBAN
AGENDA
FOR THE EU

WORKING TOGETHER
FOR BETTER CITIES

DIGITAL TRANSITION



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Background

According to data 169 million EU citizens lack even basic digital skills. This accounts for 44% of Europeans between the ages of 16-74. Lack of access to digital services as well as lack of awareness of digital possibilities have major impact on the digital divide, resulting in social divide.

Digital transformation should promote the participation of everyone, in all aspects of society. The implementation of digital technologies must not lead to the exclusion of individuals or segments of the population. It must consider people's different ranges of possibilities to interact with digital tools. It also should ensure accessibility for persons with disabilities. A mobilising, integrative and inclusive approach to participation is important to allow for balanced opinion making

Access to ICT (Information and communications technology) and Broadband connection alone will not sufficiently bridge the existing gap. Additional support for existing and new training and retraining programs for development of digital skills is crucial. Local governments have opportunities to work within the community and reach citizens who are not involved in any form of formal education and have no access to job related training opportunities.

The following booklet describes the experience of the members of Digital Transition Partnership and the practical experience of two models for providing access to digital services. The two models are used in Helsingborg, Sweden and Sofia, Bulgaria.

Even though the Helsingborg model is focused firstly on providing assistance in the use of personal devices, access to services and Face to Face (F2F) learning, and the Sofia model focuses on training and acquiring basic skills the set ups of spaces, employee training and other features are the same.

This booklet aims to provide a toolbox which could be helpful in setting up a digital center or a place where people with no digital skills can turn to for help. We have identified 7 basic elements or tools which are essential in creating a digital center.

Space

- Accessibility for all
- Friendly environment
- Equipment and staff

The space has to be easy accessible for all citizens. That indicates it should be placed where people already meet and feel welcomed such as a public library, Town Hall, community center, shopping mall area, coffee shop etc. No membership needed and no purchase required to visit/attend/use. It should also be available for citizens with disabilities. It could also be a mobile unit equipped with the necessary equipment and staff listed below.

Access to internet

- Reliable and fast enough access to internet is a must
- Understanding connectivity is part of the training
- Fixed or wireless connection
- Data security

Proper access to internet is essential for training. Without reliable connection the focus of the training will easily move from the actual purpose to discussions of connectivity issues. Then again understanding basics of connectivity is part of the training.

There are two main categories of connections: wired and wireless. Wireless connection is usually built based on WiFi (WLAN inside the building) or 3G/4G cellular network connections. When cellular connection is used, one should ensure that there is a strong minimum 3G network available and that network has enough capacity to support multiple simultaneous users (local network operator can help to decide this).

In case of wired connection or indoor wireless solution (like WiFi), please ensure that there is a proper connection out of building to data network. Depending the technology used and data network operator settings, there is a certain range of data speed defined below the maximum

speed of the connection. Make sure that the lower limit is not less than 100 Mbits, which should be feasible data speed for most of the use cases.

With the local wireless WiFi networks we need to ensure the data security. Without securing the connection between the device and the wireless router, the data transferred over the air is open for listening by advanced device users. Network manager should set a password for the wireless network to protect its users and the data transfer. Other option would be to build VPN (Virtual Private Network) that will ensure the end to end connection.

Devices

- Basic device set up to start with
- Device technology is evolving rapidly
- Long term development activity with the maintenance plan

Minimum requirement

Desktop computers including software. If there is an option you could use open source software.

Laptop computers including software. If there is an option you could use open source software.

There are advantages for citizens to use a keyboard and a computer mouse as it is good training if they only operate a smartphone otherwise.

Still, in training and support we need to ensure that people can use the devices that they have invested in, regardless of the operating system on their devices.

Using tablets is valuable as they often feature the same operating system as smartphones and therefore are easy recognizable to the user.

Based on pilot experience touch screens are much easier to use by the trainee.

Printers and scanners are also needed part of the set up.



Some ideas for the next steps

Lab – makerspace – a place where one can test “new” technology such as VR/AR, 3D printers and advanced software such as design software, 3D modulation software, music making software.

Device base should be a long-term development activity starting small and expanding over time depending on funding opportunities. Some of the device types are rapidly evolving technology, the maintenance plan should be in place to keep the device base functional and up to date.

Content of the training (Curriculum)

When it comes to the content/curriculum of the training our pilots have taken different paths.

PATH 1: Face to Face in Helsingborg

Assisting and supporting people with their daily issues and tasks. In Helsingborg we use the Face to Face (F2F) approach for an informal learning opportunity within our supporting role. In practical terms, when we are asked to help our visitors we sit down beside them and guide them through their process on the computer/device. This way our visitor needing help is learning by doing. In our evaluation together with our users this approach has been voted the most successful.

The staff at Digital Center Helsingborg assists with a wide range of topics and questions, F2F every day. See Appendix for details.

Since we can't reach all citizens via the Digital Center at the library we have also established an outreach program. You could say that we bring the Digital Center out to citizens. The program consists of different concepts. The modules are staffed with the same persons manning the Digital Center. On a regular, weekly, basis we visit senior centers, community centers, local library branches and meet visitors there. This concept includes supporting and assisting visitors with their own devices. A lot of the questions/issues are the same as in the Digital Center but lean more towards smartphone and tablet issues.

We also participate in various initiatives organized by other organisations. In this concept we bring with us various forms of tech such as robots, VR units, 3D pens, tablets with educational apps and Green screen. In collaboration with the visitors we explore the different technology.

Last but not least we do pop-ups in various public locations such as shopping malls, county fairs and bring our technology (as mentioned above) along, again, to explore together with visitors. This is an excellent opportunity to market the Digital Center.

FACE TO FACE IN HELSINGBORG



PATH 2: Classroom training in Sofia

Sofia is testing two approaches. Developing one's own service that enables citizens to acquire digital skills without having to pay for it, and to work with a network of stakeholders working to minimize the threat of the digital divide.

We started setting up our programme following this methodology:

DESIGN OF PILOT ACTIONS

Step 1: Analysis of existing initiatives in the city (policies, good practices and potential partners).

Step 2: Structured dialogue with stakeholders and users.

IMPLEMENTATION OF PILOT ACTIONS

Trainings provided by Sofia Municipality - Sofia City Library.

Partnership with NGOs (Tulip Foundation, project Grand Experts).

UPGRADING PILOT ACTIONS

Lessons learned

Testing of new services to be provided by the municipality - Start of the projects: Active&Healthy Ageing by using Advanced IoT-enabled Software Solutions (ACTIVAGE)

Our structured courses have been provided by Sofia city Library through their Elderly 60+ Basic Computer Literacy Training.

As of 2016, library staff have been helping seniors learn some basic computer skills without developing a structured training program. In the ongoing work, library staff also need to assist regular visitors, searching for information on the Internet and working with email. These individual activities were structured and developed into specific training programs based on the experience gained so far and the results of the structured dialogue with stakeholders and users. See Appendix 1. for more details.

CLASSROOM TRAINING IN SOFIA



Other examples of content of training (curriculum)

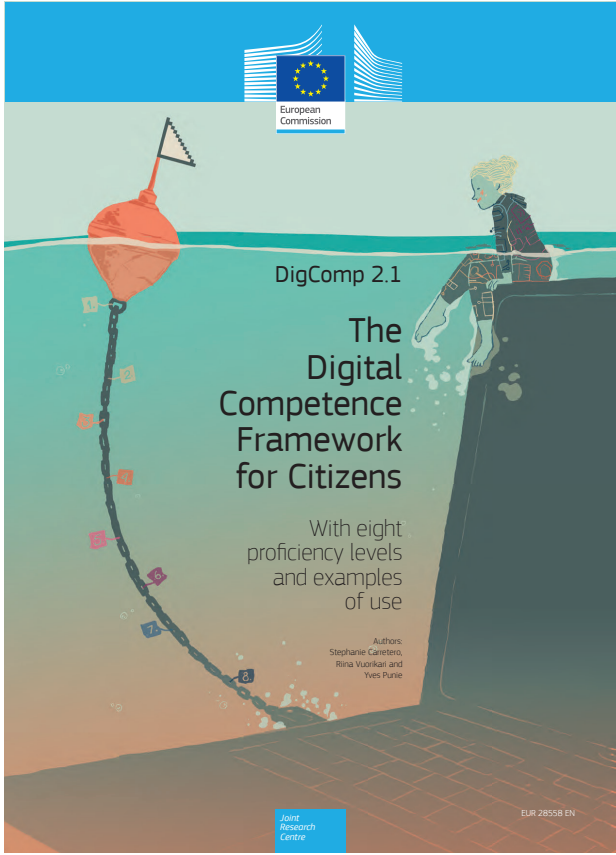
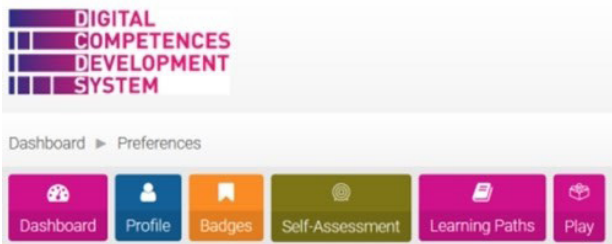
DCDE ([DCDS – Digital Competences Development System](#)) was developed by the DAISSy research group of the Hellenic Open University and provides the following:

- A self-assessment tool (SAT)
- Different learning paths (LP) composed of DigComp competences,
- Assessment tests
- Badges that learners will earn by passing the tests at the end of each module. Badges are also issued when completing, successfully, a learning path and the module/s which contribute to gain a DigComp competence;
- Forum service to communicate with teacher and peers.

If you don't want to use the whole Methodology in the beginning you can start by using their Annex 1 - Learning outcomes, in the Methodology, and use it as a checklist on basic digital skills. You may also use it as a teaching plan for your students. Follow the link above.

At the moment DCDE is available in English, Greek, Italian, Latvian, Romanian, and Spanish.

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DigComp 2.1 ([DigComp 2.1: The Digital Competence Framework for Citizens](#)) is developed by JRC (Joint Research Center, European Commission) and offers a tool to improve citizens' digital competence. It is divided in to five competence areas with eight proficiency levels in each area.

Staff with training skills

- Staff needs device and internet expertises
- Pedagogical approach is a must

Overall you need staff that is well versed/experts on devices and services (Internet) but the skill set and amount of staff is dependent on curriculum and set up.

It is important to always have a pedagogical approach which means supporting the user, showing and explaining how to proceed with their task (not doing it for them).

The staff in Helsingborg have a special interest in new technology, software, apps, a tutorial approach and problem solving. Thus making them well equipped to help visitors.

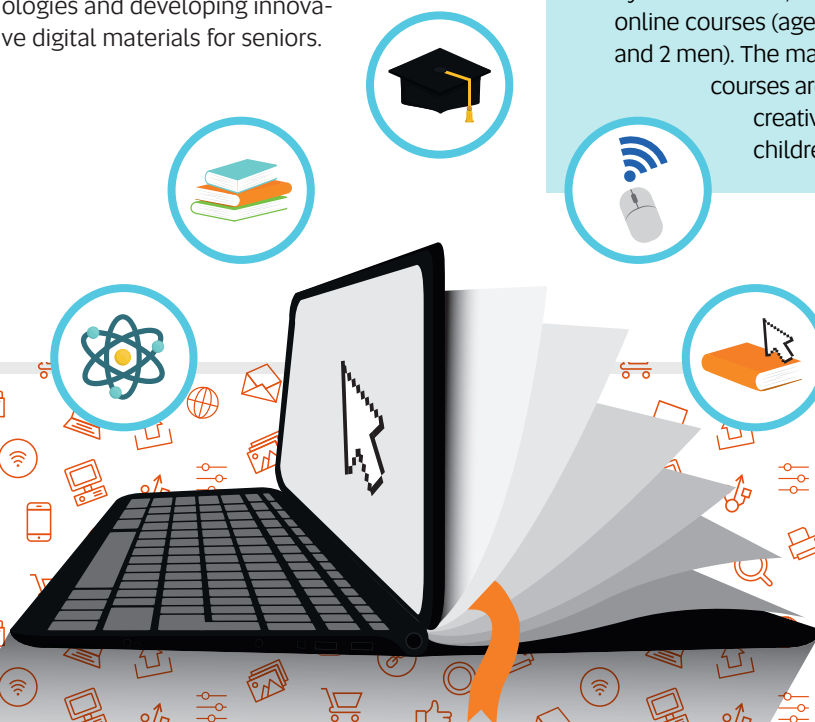
CASE GRAND EXPERTS

As part of our efforts to broaden the scope of our programme, Sofia have partnered with Tulip Foundation in their project "Grand Experts". It aims to improve and expand digital learning opportunities for older adults who already developed Internet skills by developing an innovative approach to enable seniors to create their own multimedia enriched learning offers and online courses.

The interest and desire among older adults to participate in this non formal training is really high. Many learning opportunities for seniors are implemented so that they are not reachable for all, like people with mobility restrictions, people with family commitments, or people from rural areas. The "Grand Experts" -project follows a new, innovative approach to provide solutions. Selected seniors empowered to develop digital learning content, and to provide it to other seniors in a learning platform. The core topics are empowering older adults to become authors of their field of expertise using new technologies and developing innovative digital materials for seniors.

The main activities that were carried out in 2019:

- Training for the creation of digital learning content development of a course and manual for seniors who would like to become authors of online learning materials. It provides basics in didactic and instructions on digital learning content (learning modules, videos, interactive exercises):
- Innovative learning platform which was set up according to the requirements of seniors. The learning platform is used for mobile learning;
- Digital, multimedia enriched, learning content -an analysis of interests and needs of seniors with regards to learning opportunities.
- Following the publication of an open invitation to participate in the pilot project, 72 seniors were interested. The first meeting was attended by 48, the second meeting by 26. As a result, 16 seniors developed online courses (aged 60 to 80, 14 women and 2 men). The main topics of the online courses are gardening, healthcare, creativity, cooking, working with children.



Collaboration and marketing

- Recognize your target group and their needs
- Collaborating is helping with resourcing and marketing
- Digital inclusion as a shared goal

In order to achieve its goals with often limited resources, collaboration with different stakeholders is necessary.

One of the main issues in operating a digital center is reaching your target group. It is not merely enough to make it known that such service exists. It is often a process of building trust and convincing your users why digital skills are an important part of everyday life. Finding a job more easily or being able to connect to others using new communication tools. How you promote your programme depends on the needs of your target group.

The involvement of different groups and organizations could be quite helpful in that regard. Educational institutions and social services providers that already have a connection with your target groups are invaluable allies in understanding and reaching potential users. They can also help build on existing programs and extend the scope of services offered by the digital centers.

Different departments within the municipality itself are often faced with the same problems regarding the digital inclusion. Departments that provide digital and paper services need to know the role of the digital center in order to refer users. It is essential to build channels with other municipal organizations in order to establish a proper collaboration. Increasing digital inclusion among the citizens should be a shared target cross organizations.

Budgeting and Funding

- Understanding the funding for the training is a must
- Different options

Lack of dedicated funding options is one of the largest bottlenecks faced by cities when they try to create a

digital center. Both examples from Helsingborg and Sofia have used funding through existing structured libraries to set up their digital centers.

Helsingborgs Digital Center -project has no additional funding. Since it is a collaboration project between the Public Library and the Digitalisation department of the Municipality, funding came from their respective yearly budgets. Funds were re-allocated to the project, initially, in the start-up phase. The funds were used to invest in new computers, new software subscriptions, front end tech and furnishings. Since the Digital Center is located in the Library the staff and their salaries are covered by the library's yearly budget. Going forward the project request funds when needed.

Rent or lease for the space and utilities are also something to take into account. A suggestion can be to co-locate with other organizations in the local community to reduce costs.

There are some organisations and policies in Europe you could study to move forward with your arrangements:

[ALL DIGITAL • Enhancing Digital Skills Across Europe](#)

All Digital and DCDS have produced two document that can be of use:

[DCDS Policy Recommendations • ALLt](#)
[DCDS Policy Influence Toolkit – DCDS](#)
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[European Network of Living Labs, ENoLL](#)

[The Digital Skills and Jobs Coalition | Shaping Europe's digital future](#)

At the moment there isn't a straightforward path to funding digital skills programmes on an EU level. As it is also the case in many member states.

In the document "Investing in the Future Digital Transformation 2021–2027, some different funding suggestions are mentioned, i.e. The new European social Fund+ and the Global Adjustment Fund,

Investing in the future digital transformation 202–2027 - Why is this a priority?

Key Performance Indicators

- Measure to ensure that right things get done right

You might want to set some KPIs (Key Progress Indicators) for the training program. When indicators are set, implemented and analyzed properly those will help to justify the investments made and to ensure that the program will meet its goals.

It is difficult to define one-size-fits-all type of KPI set and especially to define the general target levels for the set metrics. Instead we list here some potential KPI areas where the metrics could be set.

The staff competence level. Competent staff is essential for successful training. Setting requirements for the technical, educational and “computer english” competences would be needed anyway and as there is a need for continuous learning in fast moving area of ICT world, it makes sense to define one of the indicators in this area. KPI could be related to accomplishing some training programs that is build to ensure needed competences.

Capacity and resources. Having a right amount of capacity and available at the right time will ensure that training is effective and that the money invested in facilities and people are at the right level. Number of staff per student is an important metric to define and measure. For the training, devices are needed. How many set of computers and other devices is enough, leasing or buying, license fees and other costs is one area to monitor. Depending on the operating model, number of visiting people might be a key indicator for successful resource use as well as the required personal support, where number of questions asked is one measure.

Customer satisfaction. It is always good to listen the customer and ensure that they will get what they need. Questionnaires and other type of feedback channels are making this possible. One widely used tool is NPS (Net Promoter Score), more info [Net Promoter Score](#) .

Efficiency and effectivity of the training.

As with every training, the efficiency and effectivity of the training should be measured. Are people learning as expected? Running tests will provide answers for this. How well are people with training needs reached? Is the training given covering their needs or will they come back next day? Is the support available when it is needed? It would be wise to spend some time thinking about how to measure these topics.

Student proficiency. To understand the level that fits with people’s needs student proficiency level definition is needed. This can be done for example utilizing the model presented in Digcomp 2.1. This measure is not relevant for support type training.

Appendix 1.

Topics/questions, the staff at Digital-Center Helsingborg assists with, F2F every day;

1. The public computers; user details or updating passwords, How to manage the technology.
2. Technical question about the user's own computer, smartphone, tablet or USB Drive.
3. Photocopying; how the machine works, one sided copies to two sided copies, enlarge documents.
4. Scanning documents using our public scanners.
5. Microsoft Office software; (eg Microsoft Word, Power-Point or Excel). How to compose a document - CV - letter, charts in Excel etc.
6. Online banking; logg on to my internet bank from a computer or other device. Print bank statements from a computer, pay bills from a computer or other device.
7. Information retrieval; e.g reference questions. Search methods on the webb to gather information and/or different web browsers.
8. Social, legal or authority questions; eg questions about insurance, immigration, national job search services, tax authorities or police record extracts, e-services - both the municipality's own and other national authorities. How to fill out these services/forms.
9. Personal Internet use; E-mail issues such as; create an e-mail, reset my password, write an e-mail, attach files.
10. Personal online safety; should I save my passwords in a webb browser? Can I erase my digital footprint?
11. Social Media; set up an account, publish content on different platforms, Media and Information Literacy issues in this context.

NOTE: Above asked questions can also be transformed into a Minimum Standard of the skills the staff needs to possess. The most important skill is problem solving e.g no need to know the exact answer but together with the user search for the information needed.

The training program in Sofia; "Elderly 60+ Basic Computer Literacy Training" content expanded on modules:

1. Mobile devices.
2. Computer system
 - 2.1. Basic components and peripheral devices.
 - 2.2. Graphic user interface- basic elements and use
 - 2.3. Operational system
 - 2.4. Data storage devices
 - 2.5. Data archive
 - 2.6. Internet connection
 - 2.7. Information search and usage
 - 2.8. E-mail
 - 2.9. Cyber security and internet safety
 - 2.10. Intellectual property on the Internet
 - 2.11. E-services
 - 2.12. Word, excel, ppt
3. Tablet
 - 3.1. Basic functions and content management
 - 3.2. Safe exploitation
 - 3.3. Internet connection
 - 3.4. Applications
 - 3.5. Video and photo
4. Smartphone
 - 4.1. Basic capabilities and content management
 - 4.2. Safe exploitation
 - 4.3. Contacts
 - 4.4. Internet connection
 - 4.5. Applications
 - 4.6. Photo and video
 - 4.7. Content sharing
 - 4.8. Communication through internet apps
5. Smart TV

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EVA HVEEM

Librarian
Helsingborg Public Library
tel. +46(0)72-395 25 47
eva.hveem@helsingborg.se

VERONIKA MANOVA

Expert Sofia City Council
City of Sofia
tel. +359 884 800 151

HEIKKI HUHMO

Project Manager Smart City
BusinessOulu, City of Oulu
tel. +358 50 360 5940
smartcityoulu.com

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